

Amendments to the Specification:

Please amend paragraphs [048], [050], and [052], as shown below.

[048] by way of example, another embodiment of the invention involves an interleaver construction 700 with three processes as illustrated in Figure 7. An entire input sequence of symbols 702 is segmented into M sub-blocks of symbols in a first process 704. Lengths of the sub-blocks may be the same or different. For this example, each sub-block is assumed to be the same length of $R(2D+1)$ symbols, where R is a positive integer. The sub-blocks are sequentially enumerated from 1 to M sub-blocks. A K^{th} sub-block is one of the M sub-blocks, where K is between 1 and M, inclusive.

[050] After the third process 708, a sequence of interleaved symbols is formed at step 710, in which the symbols in a K^{th} sub-block are spread over E_K sub-blocks prior to the K^{th} sub-block and L_K sub-blocks after the K^{th} sub-block. E_K is the lesser of D and (K-1), which is denoted as $\min(D, K-1)$. L_K is the lesser of D and (M-K), which is denoted as $\min(D, M-K)$.

[052] Both the intra-block and inter-block permutations in Figure 7 may be deterministic. Thus, once rules for both permutations are determined, the intra-block and inter-block permutations may be combined into a single step. In another embodiment, a resulting interleaving algorithm combining the permutations into a single step is illustrated as flowchart 900 in Figure 9. At a start of the algorithm, K is set to one at step 902. From step 902, if K is not less than (M+1) at step 904, then the algorithm stops at step 906. If K is less than (M+1), then E_K and Q are set to $\min(D, K-1)$ and zero at step 908 and 910, respectively. Following step 910, if Q is less than $R(2D+1)$ at step 912, then the algorithm processes to step 914. At step 914,

Q' is the intra-block permuted position of Q . If $\text{mod}(K-Q'-1, 2D+1)$ is not less than E_K , then the symbol at $[\text{mod}(K, D+2); Q]$ is moved to $[\text{mod}(K - \text{mod}(K-Q'-1, 2D+1), D+2); Q' - \text{mod}(Q', 2D+1) + \text{mod}(K-1, 2D+1)]$ is moved to $[\text{mod}(K, D+2); Q']$ at step 920, the symbol at $[\text{mod}(K, D+2); Q]$ is moved to $[\text{mod}(K - \text{mod}(K-Q'-1, 2D+1), D+2); Q' - \text{mod}(Q', 2D+1), D+2); Q' - \text{mod}(Q', 2D+1) + \text{mod}(K-1, 2D+1)]$ at step 922, and the algorithm returns to step 918. At step 912, if Q is not less than $R(2D+1)$, then the algorithm progresses to step 924. At step 924, if K is less than (L_1+1) , then a $\text{mod}(K-D-1, D+2)^{\text{th}}$ sub-block of interleaved symbols is outputted at step 926 and the algorithm progresses to step 928. If K is not less than (L_1+1) , then the algorithm progresses directly to step 928. At step 928, if K is equal to M , then remaining $\text{mod}(K-D+P, D+2)^{\text{th}}$ sub-blocks of interleaved symbols for $P = 1, 2, \dots, D$ are outputted at step 930 and the algorithm progresses to step 932. If K is not equal to M , then the algorithm progresses directly to step 932. At step 932, K is incremented and the algorithm progresses to step 904.